



Micronas, 7388

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT:** Frerichs **GROUP:** Not yet assigned  
**SERIAL NO:** 10/719,648 **EXAMINER:** Not yet assigned  
**FILED:** November 21, 2003  
**FOR:** SENSOR FOR MEASURING A GAS CONCENTRATION  
OR ION CONCENTRATION

## **FIRST PRELIMINARY AMENDMENT**

Please amend the above-identified application as follows:

## IN THE CLAIMS:

Amend claims 1-9 as follows:

1.(Currently Amended) Sensor for measuring a gas concentration or ion concentration, comprising having:

- a substrate (1) of a first charge-carrier type;
- a drain (3) of a second charge-carrier type fashioned on the substrate;
- a source (2) of the second charge-carrier type fashioned on the substrate;
- a channel region (4) of the substrate, which is arranged between the drain (3) and the source (2);
- a conductive guard ring (1), which is arranged outside the channel region;
- a sensitive gate layer (8) whose potential depends on an ambient gas concentration or ion concentration, there being an air gap (1) between the gate layer (8) and the channel region (4), characterized in that between the guard ring (1) and the channel region (4) there is fashioned an